Claim 1 recites a tomographic image processing method comprising "carrying out dynamic range compression processing on the image data so as to compress a high density range of the chest tomographic image" (claim 3 recites a similar feature). The Examiner still contends that col. 12, lines 21-32, of Nakazawa discloses this feature. As best understood, in the response to the arguments section, the Examiner is contending that since the total dynamic range is compressed, the high density range would also be compressed. Office Action at page 2.

Applicants submit that the Examiner's contentions are inaccurate. The solid line in Fig. 18 of Nakazawa illustrates the density curve of the original image. The high density region corresponds to the lung field and the low density region corresponds to the mediastinum portion (see Fig. 17). Nakazawa discloses that the dynamic range of the density is compressed (equalized) by allowing the density range of the mediastinum portion to come near the lung field portion (dotted line in Fig. 18, See also col. 3, lines 43-52). This compresses the total dynamic range of the image but does not necessarily compress the high density range of the image (i.e., the density range of the lung field is unaffected).

Therefore, Applicants submit that the Examiner's contention that compressing the total dynamic density range "will read also on high density" (Office Action at page 3) is unsupported.

A key feature of the present invention, as set forth in claims 1 and 3, is compressing a high density range of the chest tomographic image. When only dynamic range compression processing is carried out on an image other than the tomographic image, the total density range or a low density range might be compressed. The inventors have found that, in the case where dynamic range compression processing is carried out on the chest tomographic image,

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compressing the high density range produces an image that has a natural impression and provides

for easy diagnosis.

Accordingly, Applicants submit that Nakazawa does not disclose or suggest at least the

claimed compression of a high density range as set forth in claims 1 and 3.

II.   Claim Rejections - 35 USC § 103

The Examiner has rejected claims 2 and 4 under 35 U.S.C. § 103(a) as being unpatentable

over Nakazawa in view of Tsuchino et al. (US 5,493,622) ["Tsuchino"]. For at least the

following reason, Applicants traverse the rejection.

Applicants submit that claims 2 and 4 are patentable at least by virtue of their respective

dependencies.

The Examiner has rejected claim 5 under 35 U.S.C. 103(a) as being unpatentable over

Nakazawa in view of Wang et al (US 6,424,730) ["Wang"]. For at least the following reason,

Applicants traverse the rejection.

Because claim 5 recites features similar to those given above with respect to claim 1 and

the Examiner's rejection of these features is similar to that given above with respect to claim 1,

Applicants submit that claim 5 is patentable for at least reasons similar to those given above with

respect to claim 1.

The Examiner has also rejected claims 6-9 under 35 U.S.C. § 103(a) as being

unpatentable over Nakazawa in view of Wang and Tsuchino. For at least the following reason,

Applicants traverse the rejection.